

4. On the Gazelles of Tunisia.

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GAZELLA DORCAS (Linn.).

The common Dorcas Gazelle is to be met with throughout the greater part of Central and Southern Tunisia, frequenting the vast semi-desert plains abundant in those districts, but not the more sandy inland country of the extreme south of the Regency, where it is replaced by another species. So far as I can ascertain, the Dorcas Gazelle never occurs in the Tell country; but I have found it in the neighbourhood of Kairouan, which is probably the extreme northern limit of the range of this species in the Regency. On the extensive plains to the west of Gafsa I have found it particularly abundant; and I understand it is plentiful in the neighbourhood of the Chott Djerid, and throughout a considerable portion of the coast-country of the south, but not in the true desert further inland, where sand-dunes take the place of the stony scrub-covered plains. It may occasionally stray into the sand country, but this is exceptional.

In winter the Dorcas Gazelle congregates in large herds, often numbering over one hundred individuals; but in spring these herds break up, and one then meets with the Gazelles in small parties or singly. The female *G. dorcas*, I am told, gives birth to but one young one at a time, and this generally in the month of April.

The horns of this species vary considerably both in size and in shape. As a rule, those of the adult male are stout, deeply annulate, and lyrate, measuring from 10 to 13 inches in length along the front curve; those of the female are much shorter, straighter, smoother, and more slender.

I may here mention that I have specimens of the Dorcas Gazelle from the country south of the Chott Djerid, which are somewhat paler in colour than the ordinary type. No doubt this variation in colouring is due to some difference in the nature of the soil and surroundings of the districts from whence these particular specimens came.

GAZELLA CUVIERI (Ogilby).

The Mountain Gazelle, the *Edmi* or *Edem* of the Arabs—the Tunisians use the latter name—is to be found sparingly on most of the mountains throughout the Tunisian Regency. Essentially a mountain species, as its name implies, it never occurs, so far as I am aware, on the plains, or at any distance from hilly country.

I have met with the *Edmi*, and obtained specimens of it, on some of the higher ranges near Kasrin, in Central Tunis, and have found it in the south near Gafsa and Tamerza. In the north of the Regency it seems to occur on the mountains near Zaghouan, the extreme eastern range of the Atlas, and in the neighbourhood

of Ghardimaon, on the Algerio-Tunisian frontier, from both of which places M. Blanc, the naturalist in Tunis, tells me he has received specimens in the flesh. I myself have also been offered Edmi-shooting on an estate only some twenty miles or so south of Tunis. It seems evident, therefore, that the species has a wide range in the Regency, although perhaps it is nowhere very abundant.

In Algeria, as shown by Mr. E. N. Buxton¹ and Sir Edmund Loder², the Edmi occurs on the mountains of the Atlas, notably on the Aurès range, and I myself have seen freshly-killed specimens of it in the Biskra market; but probably the species has a more limited range in Algeria than further east, in Tunisia, where the character of the country, and more particularly of the mountains, is more compatible with the requirements of this animal.

G. cuvieri is to be found either in small herds or singly, and occasionally, though not as a rule, at a considerable elevation. On the Djebel Selloum and Djebel Semama, near Kasrin, both of which mountains are nearly 4000 feet above sea-level, I found the Gazelles about halfway up. These mountains, although steep in places and with some very rugged scarps, are in great part well-wooded with Aleppo pines, and on the lower slopes with a thick undergrowth of the usual *maquis* vegetation. In this brushwood the Gazelles easily escape detection and are naturally not very often seen. Although fond of cover, the Edmi will adapt itself to circumstances, and seems equally at home on the arid mountains of the south, where there is but little vegetation, and that merely of a dwarf description, affording slight shelter. In the spring, when my hunting-trips after Aoudad (*Ovis tragelaphus*) and Edmi have taken place, there has always been a little water on these mountains; but for some months of the year, I am told, the water-courses are dry, and the animals then, should they wish to drink, must travel some distance. That both these species, however, shift their quarters constantly I feel convinced, force of circumstances rendering them as *nomad* as the Arabs themselves.

The Edmi is very much larger than the Dorcas Gazelle, its weight being almost double. Its coat is darker in colour and with rather longer and coarser hair, while its knees, besides having very strongly developed brushes, show distinct callosity. The horns in the adult male are very stout and deeply annulated, and generally with but little curve, measuring about 13 inches, or even more in fine specimens. Those of the female are much more slender and smoother, but sometimes of fair length, some in my possession measuring 11 inches.

GAZELLA LODERI, Thos. (P. Z. S. 1894, p. 470, pl. xxxii.)

This pale desert Gazelle, only recently scientifically described, and named by Mr. Oldfield Thomas after Sir Edmund Loder, is

¹ See Buxton, P. Z. S. 1890, p. 363.

² See Loder, P. Z. S. 1894, p. 473.

